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**Elegy: GTA USA Gun Homicides
2018/2019**

**Live Streamed Game Modification
Data Visualization System**

<http://www.delappe.net/play/elegy-gta-usa-gun-homicides/>

3760
7/12/2018



This document details the design and implementation of *Elegy: GTA USA Gun Violence*. *Elegy* was a live streaming, 24/7, self-playing automated gaming mod for Grand Theft Auto V to remake the gameplay to act as a data visualization system. Gun homicide data was scraped continuously from the Gun Violence Archive online, gun homicide totals are revised daily on this website, these figures were actively fed into the project. The game would reset itself daily, starting at 0 each midnight, each day the new total body count since January 1st was reenacted in its totality over the next 24 hours through the game play and so on. The project went live on July 4th, 2018 when there had been 7,293 documented gun homicides in the United States – by the end of 2018 this number grew to 14,730, on January 1st, 2019 the homicide count for the year began anew at 0. The project operated for one year from July 4th, 2018 to July 4th, 2019. *Elegy* was live screened in its totality on Twitch.tv, the hyper popular live streaming gaming platform. The work was accompanied by a looping soundtrack, of the first radio recording of "God Bless America" as sung by Kate Smith in 1938. The work is a pilot project to explore data visualization using computer gaming. "Elegy" ceased live streaming after one year of 24/7 online operation on July 4th, 2019.

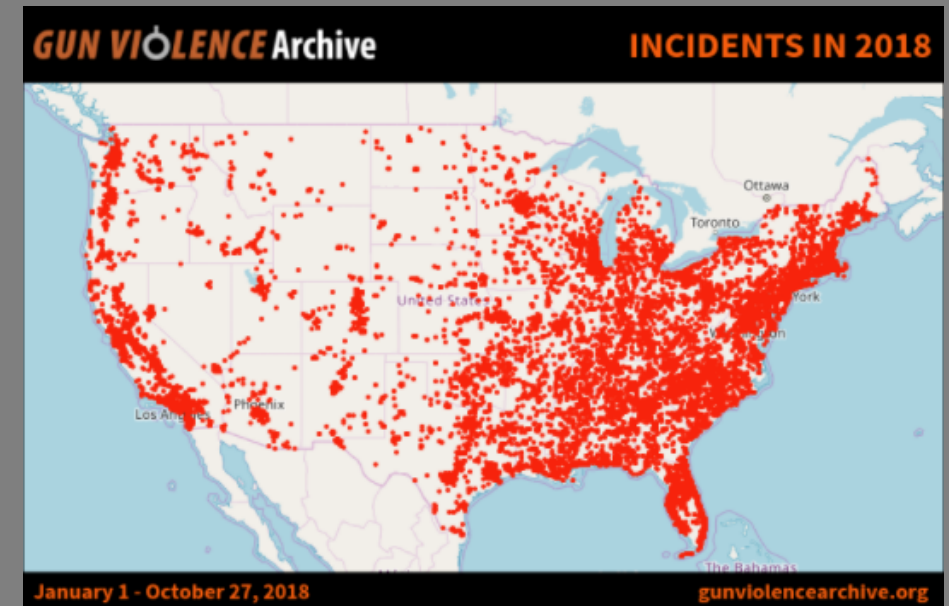
Elegy was developed in collaboration with Albert Elwin of the Biome Collective, and included early project consultation with James Wood.

Elegy: GTA USA Gun Homicides

Research Questions:

This research addressed several research questions:

- How can an existing video game be modified to function as a data visualizer?
- How can the structure of an open world video game be adapted to address highly controversial issues surrounding gun violence?
- How can video game technology be adapted to subvert the conventions of shooter games?



Elegy: GTA USA Gun Homicides

Background:

On February 14th, 2018, a lone gunman armed with a military style AR15 semiautomatic rifle killed 17 students at the Marjory Stoneman Douglas High School in Parkland, Florida. The year prior to this I had left the United States to live and work abroad in Scotland, taking on a research professorship at Abertay University in Dundee. As one of a handful of Americans working in the division of Games and Arts, I'm often the one contacted by local and national press for interviews regarding various issues surrounding games and violence.

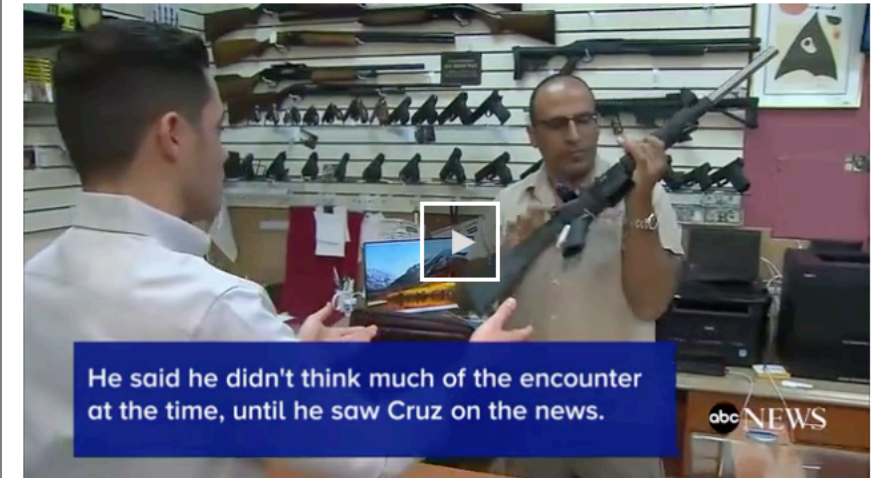
Just after the grisly killings in Florida, President Trump made comments to the effect of blaming videogames for such violent mass shootings. Soon thereafter I was contacted by a local newspaper, The Courier, to provide some commentary. Prior to the interview I did some background research. I came to find some rather startling statistics. In 2017 there had been 15,686 deaths due to gun homicide in the USA (if one were to include suicides using guns this number would be nearly tripled). In comparison the USA counted 8464 military deaths as combined from the wars in Iraq and Afghanistan. America would seem to be at war with itself. The connection between actual real-world violence and video game violence has been carefully researched with very little evidence that the latter leads to the former. In fact, one study shows quite the opposite with the release of major gaming titles actually coinciding with the slight dip in youth crime rates. I discussed these findings with the Courier journalist and shared my opinion that Trump and others were simply looking to create a distraction to the very real issue of the easy access to guns in the United States. It was this experience that led to the development of the basic concept behind *Elegy*.

Trump turns spotlight on violent video games in wake of Parkland shootings

The president meets with video game industry executives on Thursday.

By **Jordyn Phelps**

8 March 2018, 17:39 • 5 min read



Gun shop owner says he turned away Florida shooting suspect from buying AR-15

"And I said, 'Because I don't need an 18-year-old to buy [a] weapon and clear out his hig...[Read More](#)"

President [Donald Trump](#) is set to meet with representatives from the video game industry at the White House Thursday after the president pointed to violent games as a contributing factor to school violence in the wake of the Parkland, Fla. high school shooting.

Elegy: GTA USA Gun Homicides

Concept:

The concept behind the work is based in part on the previously noted experience – as an artist long involved with creatively engaging video games and contemporary politics in my practice, the idea to utilize a game as a systematic device for recounting real world deaths is something I had been considering for some time. Much of my past work has engaged video games as a platform for recounting and memorialization of real world violence and war. In projects such as “dead-in-iraq” (2006-2011), wherein I intervened in the US government funded *America’s Army* first person shooter game to type in the names of soldiers killed in the Iraq war, this was an active, performative way to count, protest and remember those killed in the war while at the same time questioning the role of video games as a recruiting device.

The ideas behind *Elegy* have been germinating for a number of years. There are built in processes in game play for counting how many one has killed during competitive play. There is as well an oddly curious game mechanics in which the bodies of dead avatars or NPC’s (non-playing characters) will lie in state for a brief period of time and then either simply disappear or slowly fade into the ground. The basic concept behind *Elegy* came about through consideration of such processes regarding the functioning of death in video games - while also keenly interested in connecting these processes of playing, killing and dying in video games to real world contexts. In this instance, to develop a creative response to those politicians who race to place blame and essentially misdirect concerns over the massive number of gun homicides in the USA. It was through such critical processes of ideation that the notion to utilize a gaming system to literally visualize real world gun homicides was envisioned.



Elegy: GTA USA Gun Homicides

Design Process:

Elegy was developed using an iterative process where the modifications were prototyped, tested and reevaluated prior to a working project release. The initial concept for the project was to programmatically alter the game in order to halt the process of dead NPC's or avatars disappearing from the game space of GTA5. The idea was to reprogram the game so that a growing pile of virtual bodies would serve to represent the daily update to the actual number of gun homicides as fed into the game by the Gun Violence Archive. What we discovered in attempting this first concept was that GTA5 had in its programmatic structure a limit of 224 NPC's for any game session. This was not a number we could modify as this limit exists to ensure the effective operation of this very processing intensive game. This limitation thus led to a new direction for the project – these limits became quite important to the development of the project as it exists and quite essential to our iterative design process.

We shifted to a mobile camera point of view – doing so thus allowed the NPC's to shoot one another, die, lie in state, then disappear off camera. The first tests of this process were successful albeit using a forward moving camera – the results were good but not entirely satisfactory as these were too similar to a typical player experience. Reversing the direction of the camera to a back-tracking shot was attempted and proved aesthetically far superior to the forward moving POV. This became the visual motif for the project. The data scraping from the *Gun Violence Archive* was incorporated into the work during this process of experimentation. The last addition to the work was the inclusion of the soundtrack. “God Bless America” was chosen as this song has become a mainstay of American culture since 9/11, played in the seventh inning of baseball games and quite simply this song has become a clarion call of American exceptionalism and patriotism. I chose the song prior to realizing that 2018 was the 100th anniversary of the composing of this song by Irving Berlin – a Jewish immigrant who wrote this song in celebration of the country that had accepted him and his refugee family from Eastern Europe in the 1900's. Ironically his family would likely not have been welcomed into the USA of 2018.

Elegy: GTA USA Gun Homicides



Elegy Game Play Video

4 minute video doc recorded 10/7/2018

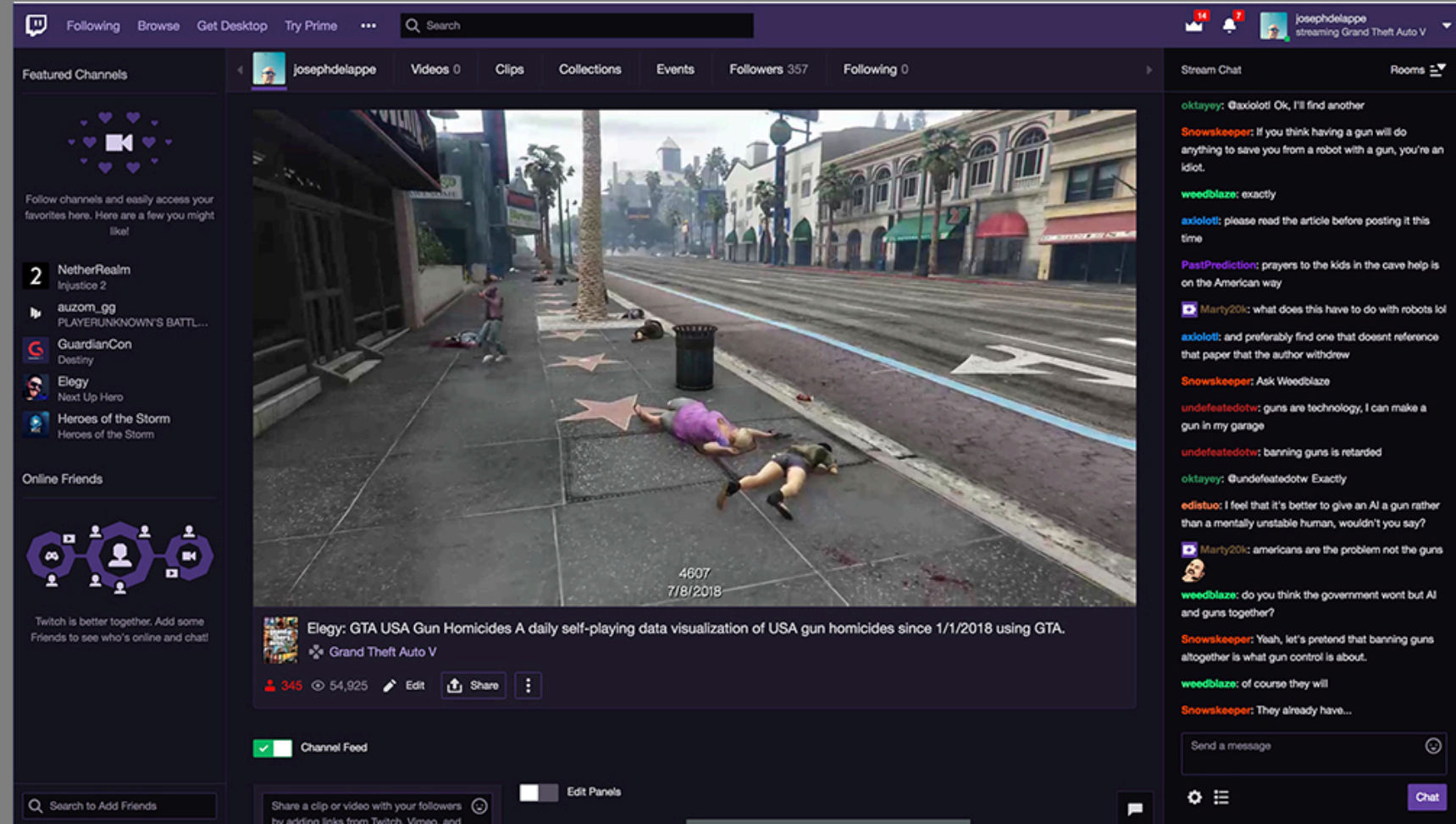
<https://www.youtube.com/watch?v=VazQ3RdeyDs>

Elegy: GTA USA Gun Homicides

The Live Stream:

As one of the goals of this project was to reach the largest audience possible, we chose Twitch.tv as the logical platform to share *Elegy*. Twitch, since its launch in 2011 has become the largest portal online to live streamed gaming content. In 2020 the platform had 3 million broadcasters monthly and 15 million daily active users. We created a new channel on Twitch and set up the PC in my studio in Dundee to run our modified version of GTA5 as a 24/7 live stream. The live stream for the project was launched on July 4th, 2018, the live streamed ended one year later on July 4th, 2019.

The live stream became a point of sharing and interaction with viewers of the work. As the work was shared via social media and various news stories the attention to the work became quite substantial. I took this as an opportunity to engage directly with viewers, answering questions and further describing the intentions of the project.



Elegy: GTA USA Gun Homicides

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- 2 NetherRealm
Injustice 2
- auzom_gg
PLAYERUNKNOWN'S BATTL...
- GuardianCon
Destiny
- Elegy
Next Up Hero
- Heroes of the Storm
Heroes of the Storm

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Twitch is better together. Add some Friends to see who's online and chat!

Search to Add Friends

josephdelappe

Videos 0

Clips

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Events

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Following 0



Elegy: GTA USA Gun Homicides A daily self-playing data visualization of USA gun homicides since 1/1/2018 using GTA.

Grand Theft Auto V

345

54,925

Edit

Share

...

Channel Feed

Share a clip or video with your followers by adding links from Twitch, Vimeo, and

Elegy: GTA USA Gun Homicides

Stream Chat Rooms

- oktayey: @axioloti Ok, I'll find another
- Snowskeeper: If you think having a gun will do anything to save you from a robot with a gun, you're an idiot.
- weedblaze: exactly
- axioloti: please read the article before posting it this time
- PastPrediction: prayers to the kids in the cave help is on the American way
- Marty20k: what does this have to do with robots lol
- axioloti: and preferably find one that doesnt reference that paper that the author withdrew
- Snowskeeper: Ask Weedblaze
- undefeatedotw: guns are technology, I can make a gun in my garage
- undefeatedotw: banning guns is retarded
- oktayey: @undefeatedotw Exactly
- edistuo: I feel that it's better to give an AI a gun rather than a mentally unstable human, wouldn't you say?
- Marty20k: americans are the problem not the guns
- weedblaze: do you think the government wont but AI and guns together?
- Snowskeeper: Yeah, let's pretend that banning guns altogether is what gun control is about.
- weedblaze: of course they will
- Snowskeeper: They already have...

Send a message

Chat



Following Browse Get Desktop Try Prime ...

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Josephdelappe
streaming Grand Theft Auto V

Featured Channels



Follow channels and easily access your favorites here. Here are a few you might like!



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Doctor Who



PhantomSFX
PLAYERUNKNOWN'S BATTL...



KevinDDR
Tetris: The Grand Master



wintergaming
StarCraft II



ReallyNavi
Overwatch

Online Friends



Twitch is better together. Add some Friends to see who's online and chat!



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josephdelappe

Videos 0

Clips

Collections

Events

Followers 618

Following 0



Elegy: GTA USA Gun Homicides A daily self-playing data visualization of USA gun homicides since 1/1/2018 using GTA.

Grand Theft Auto V

78

115,863

Edit

Share

...



Channel Feed

Elegy: GTA USA Gun Homicides

Share a clip or video with your followers by adding links from Twitch, Vimeo, and

Stream Chat

Rooms

MyAssisOnline24_7: Anybody know the exact way this works?

MyAssisOnline24_7: I skimmed the first third of the article on it, but it wasn't really specific.

MyAssisOnline24_7: Oh...

MyAssisOnline24_7: So each night it runs the total of all nights?

MyAssisOnline24_7: OOF he was really scraping the bottom of the barrel trying to make this look as horrible as possible

MyAssisOnline24_7: fuck this lying tool

MyAssisOnline24_7: This is not representative of anything but his desperate plea for attention

MyAssisOnline24_7: hope it dies out before it finishes

MyAssisOnline24_7:

(.):::D-----gonna-----s
hootup-----mah-----school

MyAssisOnline24_7: can't wait to see my 20 show up on this stream 😊

Josephdelappe: Hi @MyAssisOnline24_7 thanks for taking a look. The work is a data visualization of gun violence, nothing more, nothing less - with musical accompaniment as data can be kind of boring.

CharmHole: was wondering when you were going to restart

CharmHole: what'd hit, 8k?

CharmHole: wonder if the game started to lag from all the corpses.

Send a message



Chat

Dissemination and Impact:

- *Elegy: GTA USA Gun Homicides*, was live-streamed on Twitch.tv 24/7 for a year from July 4th 2018 to 2019. During that time, it drew over 230,000 distinct views. Since the conclusion of the livestream in 2019, video documentation of the live stream has been recreated to be suitable for exhibitions and screenings. As well, there exists video documentation online on DeLappe's youtube channel. The youtube video *Elegy: GTA USA Gun Homicides* has to date garnered over 12,000 views.

- *Elegy* received a 2019 Webby Award, Honouree from the International Academy of Digital Arts and Sciences.

- *Elegy* has been featured in several major gallery and museum exhibitions surveying game art, including; *Playmode*, MAAT – Museum of Art, Architecture and Technology, Lisbon, Portugal (63,000 visitors/catalogue) travelling to Brazil in 2022 for the FILE – Electronic Language International Festival; *Open World: Video Games & Contemporary Art*, Akron Art Museum, Akron, Ohio (15,552 visitors/catalogue); *In a Gamescape Landscape, Reality, Storytelling and Identity in Video Games*, NTTInterCommunication Center [ICC], Tokyo, Japan (8,086 visitors); *Where We Now Stand—In Order to Map the Future*, 21st Century Museum of Contemporary Art, Kanazawa, Japan (129,110 visitors) and *The Twin*, *The Coventry Biennial 2019* (124,886 visitors).

- *Elegy* has as well been screened in a number of festival contexts, including: The Milan Machinima Festival, IULM University, Milan, Italy; VideoVortex XII, Spazju Kreattiv, Malta; and Miami@Play, Filmgate Miami Interactive Festival, Miami, Florida

- DeLappe included critical and contextual analysis of *Elegy* in an essay entitled: "Are Those Real People?: Memory and Creative Resistance", *Journal of Digital War*, Issue 1, Palgrave/Springer, London, UK



Elegy: GTA USA Gun Homicides

Selected Press and Scholarly References:

The work has reached additional audiences through coverage in the popular and scholarly press. For example, following the *Open World* exhibition at the Akron Museum of Art, DeLappe's *Elegy* project garnered a series of reviews in publications such as Artnet; Hyperallergic.com; *Forbes*; and *The Boston Globe*.

- Evans-Thirlwell, Edwin, *World of anti-Warcraft: the activists turning online video games into protest sites*, The Face, UK
- Marchese, Kieron, *'ping pond' and other twisted classics at MAAT's playmode exhibition*, Designboom.com
- Beauchamp, Scott, *America Shoots Itself*, The Baffler, NYC USA
- Zeilinger, Martin, *Survival Interventions in GTA: On the Limits of Performance in Virtual Environments*, The Video Game Art Reader, version 2.1.2018
- Baggs, Michael, *How this Grand Theft Auto stream is highlighting US gun crime*, Newsbeat, BBC News
- ITV, *Games expert condemns US gun violence with own take on Grand Theft Auto V*, ITV News
- Zwiezen, Zack, *Artist Uses GTA V To Explore American Gun Violence*, Kotaku: Gaming Reviews, Kotaku.com
- Malik, Paul, *Grand Theft Auto game modified to show scale of US gun crime culture*, The Courier, Scotland, UK



Elegy: GTA USA Gun Homicides

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